

INTRODUCTION

BACKGROUND

The hard copy State Highway System Reference Manual that is currently being used by the Utah Department of Transportation (UDOT) provides a convenient single reference to correlate inventory data with highway and topographical maps. It provides a standardized means of positively identifying specific locations on any state highway. It allows information from many sources to be correlated so that specific items can be readily identified. The data most widely and frequently used have been incorporated into the Highway Reference System format. The key elements to identify a location is the Route Reference (state route number) and Reference Number (milepost). Throughout this report, the use of the word “Manual” refers to this hard copy manual,

However, there are certain potential problems with the Manual. The hard copy of the Reference Manual is a bulky book, making it inconvenient to carry onto the field for reference. Thumb nailing the book (i.e. turning pages one after the other) to access the data about a particular road section is time consuming and requires a lot of effort. It is laborious and costly to edit or update any particular road section in the book. Adding a small detail to the road section would mean replacing the entire page with a new and updated page so as to incorporate the new data. This kind of updating calls for an old and obsolete back-up method of saving all the old pages. There is no feature in the Manual that can provide the name of the person who updated that page and the time of an update. Several spreadsheets and PC based databases (e.g. Paradox) and being used for maintaining the route and inventory data. (about 45,000 records,

PROJECT OBJECTIVES

The objective of the project is to produce a prototype CD-ROM containing the Manual in an electronic format that can be viewed directly from the CD-ROM. Specific objectives include:

- 1) Establish and meet with a Technical Advisory Committee (TAC) to receive direction and feed-back on the project.
- 2) Consolidate data from various sources at UDOT into a conventional non-proprietary database system.
- 3) Provide an computer based editor for maintaining the database.
- 4) Develop a prototype viewer for displaying the state highways using the UDOT standard GIS Route file, and interfacing the database inventory with the route display.
- 5) Provide UDOT with the prototype CD-ROM.